

INTERNATIONAL SEARCH REPORT

onal Application No

PCT/EP2004/051212

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D06F73/02 D06F58/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D06F A47B A47L A61L F26B B05B F24F A47G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 12, 29 October 1999 (1999-10-29) -& JP 11 189968 A (MIYATA YUKIO), 13 July 1999 (1999-07-13) the whole document	1,2, 4-10,14, 15
Y	GB 1 062 979 A (PROCTOR & SCHWARTZ INC) 22 March 1967 (1967-03-22) the whole document	1,2, 4-10,14, 15
Y	EP 0 479 241 A (KIMURA TAKAYUKI) 8 April 1992 (1992-04-08) the whole document	1,2, 4-10,14, 15
	----- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

8 October 2004

Date of mailing of the international search report

19/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Ureta, R

INTERNATIONAL SEARCH REPORT

In International Application No

PCT/EP2004/051212

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 433 919 A (BALTES HANS) 18 July 1995 (1995-07-18) the whole document	1,2, 4-10,14, 15
Y	EP 0 148 385 A (BALTES HANS) 17 July 1985 (1985-07-17) the whole document	1,2, 4-10,14, 15
Y	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 10, 10 October 2002 (2002-10-10) - & JP 2002 159431 A (MORIMOTO MAMORU; UCHIDA HARUO), 4 June 2002 (2002-06-04) the whole document	1,2, 4-10,14, 15
Y	FR 2 702 377 A (GABRIEL ROBEZ SARL) 16 September 1994 (1994-09-16) the whole document	1,2, 4-10,14, 15
Y	EP 0 080 790 A (TOKYO COPAL CHEM) 8 June 1983 (1983-06-08) the whole document	1,2, 4-10,14, 15
A	EP 1 057 923 A (PROCTER & GAMBLE) 6 December 2000 (2000-12-06) the whole document	5,8,9,15
A	US 5 016 364 A (COCHRANE RUSSELL D) 21 May 1991 (1991-05-21) column 6, line 23; figures 3,4	5,16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 2004/051212

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 11189968	A	13-07-1999	NONE	
GB 1062979	A	22-03-1967	FR 1404191 A US 3257739 A	25-06-1965 28-06-1966
EP 0479241	A	08-04-1992	EP 0479241 A1 JP 5051241 U US 5185939 A	08-04-1992 09-07-1993 16-02-1993
US 5433919	A	18-07-1995	DE 4235560 A1 AT 177797 T DE 59309452 D1 DK 594085 T3 EP 0594085 A1 ES 2131548 T3 JP 2527135 B2 JP 6212554 A	28-04-1994 15-04-1999 22-04-1999 11-10-1999 27-04-1994 01-08-1999 21-08-1996 02-08-1994
EP 0148385	A	17-07-1985	DE 3343111 A1 DE 3343236 A1 AT 159775 T CA 1257087 A1 EP 0148385 A2 JP 60156498 A US 4625432 A	05-06-1985 05-06-1985 15-11-1997 11-07-1989 17-07-1985 16-08-1985 02-12-1986
JP 2002159431	A	04-06-2002	NONE	
FR 2702377	A	16-09-1994	FR 2702377 A1 AT 51194 A CH 688124 A5	16-09-1994 15-03-1997 30-05-1997
EP 0080790	A	08-06-1983	JP 1378607 C JP 58159867 A JP 61043104 B JP 58155181 U JP 58155354 U JP 58027665 A JP 1373561 C JP 58045237 A JP 61036863 B JP 1060309 B JP 1584878 C JP 58061854 A JP 58068935 U JP 58073728 U JP 58087348 U EP 0080790 A2 US 4605574 A US 4656963 A	08-05-1987 22-09-1983 25-09-1986 17-10-1983 17-10-1983 18-02-1983 07-04-1987 16-03-1983 20-08-1986 21-12-1989 31-10-1990 13-04-1983 11-05-1983 18-05-1983 14-06-1983 08-06-1983 12-08-1986 14-04-1987
EP 1057923	A	06-12-2000	AT 239815 T AU 5306100 A DE 60002520 D1 DE 60002520 T2 EP 1057923 A1 ES 2199130 T3 WO 0075413 A1	15-05-2003 28-12-2000 12-06-2003 18-03-2004 06-12-2000 16-02-2004 14-12-2000

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/051212

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5016364	A	21-05-1991	NONE